

Figure 1.

Sequence B Sequence A PRL arrays are supplied with bioluminescent labels attached. The bioluminescent enzyme is shown as a star. Target DNA or RNA is extracted, sheared and allowed to hybridize to the array. Unhybridized target molecules are then washed away. Hybridization No hybridization A restriction enzyme is applied, cutting the probes that are not hybridized to target DNA or RNA. Not cut Cut The array is incubated at a temperature high enough to dissociate the remaining stem hydrogen bonds and the unbound labels are washed away. No effect Fragment removed When substrate is added, light is emitted only at sites where hybridization to target DNA or RNA occurred.

Figure 2.

No light

Negative

Light emitted

Positive